



Product Sheet

# *Candida albicans* (ATCC®) 10231™)

## Please read this FIRST

Storage Temp.  
**Frozen: -80°C or colder**  
**Freeze-Dried: 2°C to 8°C**  
**Live Culture: See Propagation Section**

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 Biosafety Level  
**1**

## Intended Use

This product is intended for research use only. It is not intended for any animal or human therapeutic or diagnostic use.

## Citation of Strain

If use of this culture results in a scientific publication, it should be cited in that manuscript in the following manner: *Candida albicans* (ATCC® 10231™)

American Type Culture Collection  
PO Box 1549  
Manassas, VA 20108 USA  
[www.atcc.org](http://www.atcc.org)

800.638.6597 or 703.365.2700  
Fax: 703.365.2750  
Email: [Tech@atcc.org](mailto:Tech@atcc.org)

Or contact your local distributor

## Description

**Strain Designation:** 3147 [CBS 6431, CCY 29-3-106, CIP 48.72, DSM 1386, IFO 1594, NCPF 3179, NCYC 1363, NIH 3147, VTT C-85161]

**Deposited Name:** *Candida albicans* (Robin) Berkhout

**Antigenic Properties:** Serotype A

**Product Description:** An ampoule containing viable cells (may include spores and mycelia) suspended in cryoprotectant.

## Propagation

The information recommended in this section is to assist users in obtaining living culture(s) for their studies. The recommendation does not imply that the conditions or procedures provided below are optimum. Experienced researchers may initiate the growth of a culture in their own way.

ATCC® Medium 200: YM agar or YM broth

ATCC® Medium 28: Emmons' modification of Sabouraud's agar

ATCC® Medium 1245: YEPD

## Growth Conditions

**Temperature:** 24°C to 26°C

**Atmosphere:** Typical aerobic

## Recommended Procedure

For **freeze-dry (lyophilized) ampoules:**

1. Open an ampoule according to enclosed instructions.
2. From a single test tube of **sterile distilled water** (5 to 6 mL), withdraw approximately 0.5 to 1.0 mL with a sterile pipette and apply directly to the pellet. Stir to form a suspension.
3. Aseptically transfer the suspension back into the test tube of sterile distilled water.
4. Let the test tube sit at room temperature (25°C) undisturbed **for at least 2 hours**; longer (e.g., overnight) rehydration might increase viability of some fungi.
5. Mix the suspension well. Use several drops (or make dilutions if desired) to inoculate recommended solid or liquid medium. Include a control that receives no inoculum.
6. Incubate the inoculum at the propagation conditions recommended.
7. Inspect for growth of the inoculum/strain regularly. The sign of viability is noticeable typically after 1-2 days of incubation. However, the time necessary for significant growth will vary from strain to strain.

**Colony and Cell Morphology:** On YEPD agar after 2 days at 25°C, colonies are cream-colored, shiny, and smooth. Older colonies show filaments-like structure at the margin and may have ridges or folds. Cells are ovoid (3.0-6.0 x 4.0-8.0 µm), budding, mostly singly and rarely clustered in young culture. Cells will elongate and form chain-like branched pseudohyphae in older culture.

## Notes

This strain is recommended by ATCC for use in the tests described in ASTM Standard Test Method E979-91 where only the taxon is specified; For sterility testing, not more than five passages from the ATCC culture should be used; Purified genomic DNA of this strain is available as ATCC 10231D-5™.

Additional, updated information on this product may be available on the ATCC® web site at [www.atcc.org](http://www.atcc.org).

## DNA Sequence

18S ribosomal RNA gene, partial sequence; internal transcribed spacer 1, 5.8S ribosomal RNA gene, and internal transcribed spacer 2, complete sequence; and 26S ribosomal RNA gene, partial sequence  
GGTTTCCGTAGGTGAACCTGCGGAAGGATCATTACTGATTGCTTAATTGCACCACATGTGTTTTCTTT  
GAAACAACTTGCTTTGGCGGTGGGCCAGCCTGCCGCCAGAGGTCTAAACTTACAACCAATTTTTTAT  
CAACTTGTCACACCAGATTACTAATAAGTCAAACCTTTCAACAACGGATCTCTTGGTTCTCGCATCGA  
TGAAGAACGCAGCGAAATGCGATACGTAATATGAATTGCAGATATTCGTGAATCATCGAATCTTTGAA  
CGCATTGCGCCCTCTGTTATTCGGAGGGCATGCCTGTTGAGCGTCGTTTCTCCCTCAAACCGCTGG  
GTTTGGTGTGAGCAATACGACTTGGGTTTGCTTGAAGACGGTAGTGGAAGCGGGATCGCTTTGA  
CAATGGCTTAGGTCTAACCAAAAACATTGCTTGGCGGGTAACGTCCACCACGTATATCTTCAAACCTT  
GACCTCAAATCAGGTAGGACTACCCGCTGAACCTAAGCATATCAATAA

D1D2 region of the 26S ribosomal RNA gene  
ATATCAATAAGCGGAGGAAAAGAAACCAACAGGGATTGCCTCAGTAGCGGGAGTGAAGCGGCAA



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AGCTCAAATTTGAAATCTGGCGTCTTTGGCGTCCGAGTTGTAATTTGAAGAAGGTATCTTTGGGCCCGG
CTCTTGCTATGTTCCCTTGGAAACAGGACGTACAGAGGGTGAGAATCCCGTGCGATGAGATGACCCGG
GTCTGTGTAAGTTCCCTCGACGAGTCCGAGTTGTTTGGGAATGCAGCTAAGTGGGTGGTAAATTTCCA
TCTAAAGCTAAATATTGGCGAGAGACCGATAGCGAACAAGTACAGTGATGGAAAGATGAAAAGAAC
TTTGAAAAGAGAGTGAAAAAGTACGTGAAATTGTTGAAAGGGAAGGGCTTGAGATCAGACTTGGTAT
TTTGCAATGCTGCTCTCGGGGGCGGCCGCTGCGGTTTACCGGGCCAGCATCGGTTTGGAGCGGCAGG
ATAATGGCGGAGGAATGTGGCACGGCTTCTGCTGTGTTATAGCCTCTGACGATACTGCCAGCCTAG
ACCGAGGACTGCGGTTTTTAACCTAGGATGTTGGCATAATGATCTTAA
```

## **Isolation**

Man with bronchomycosis

## **References**

References and other information relating to this product are available online at [www.atcc.org](http://www.atcc.org).

## **Biosafety Level: 1**

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the current publication of the *Biosafety in Microbiological and Biomedical Laboratories* from the U.S. Department of Health and Human Services Centers for Disease Control and Prevention and National Institutes for Health.

## **ATCC Warranty**

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## **Disclaimers**

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Additional information on this culture is available on the ATCC web site at [www.atcc.org](http://www.atcc.org).  
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